INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

(317) 232-8603
(800) 451-6027
www.state.in.us/idem

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

OFFICE OF AIR QUALITY

Mason Corporation
1049 U.S. Highway 41
Schererville, Indiana 46375

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F089-15312-00094	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:November 25, 2002 Expiration Date:November 25, 2007

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary source manufacturing tin chloride and tin sulfate.

Authorized individual:	Plant Manager
Source Address:	1049 U.S. Highway 41, Schererville, Indiana 46375
Mailing Address:	P.O. Box 38, Schererville, Indiana 46375
SIC Code:	2819
Source Location Status:	Lake
County Status:	Nonattainment for SO_2 and ozone Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules 1 of 28 Source Categories Minor Source under Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) Four (4) rotary dryers, identified as RD-1, RD-2, RD-3, and RD-4, constructed in 1972, 1975, 1980, and 1982, respectively, with a maximum throughput of 198.63, 198.63, 135.83, and 135.83 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions from RD-1, RD-2, and RD-3 controlled by one (1) baghouse, identified as Baghouse 1, exhausting to stack S-5, and with particulate emissions from RD-4 controlled by one (1) baghouse, identified as Baghouse 2, exhausting to stack S-6.

(b) Two (2) rotary dryers, identified as RD-5 and RD-6, constructed in 1987 and 1990, respectively, each with a maximum throughput of 135.83 pounds per hour, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions controlled by one (1) baghouse, identified as Baghouse 2, and exhausting to stack S-6.

(c) Two (2) fusion reactors, identified as FR-1 and FR-2, constructed in 1997 and 2000, respectively, with a maximum throughput of 180.29 and 600.96 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 1.45 and 1.66 million British thermal units per hour, respectively, with emissions controlled by two (2) scrubbers, identified as Scrubber 1 and Scrubber 2, and exhausting to stacks S-7 and S-8, respectively.

(d) Two (2) tin chloride manufacturing lines, identified as Mfg-1 and Mfg-2, constructed in 1987 and 1986, respectively, with a maximum throughput of 5.82 and 2.74 pounds per hour, respectively, with emissions controlled by two (2) scrubbers, identified as Scrubber 3 and Scrubber 4, and exhausting to stacks S-11 and S-12.

(e) One (1) tin sulfate manufacturing line in the R&D Department, identified as Mfg-3, constructed in 1991, with a maximum throughput of 2.74 pounds per hour, with emissions controlled by one (1) scrubber, identified as Scrubber 5, and exhausting to stack S-13.

(f) One (1) paint booth, identified as PB-1, constructed in 1992, coating fiber and plastic drums and cylinders, with particulate emissions controlled by dry filters, and exhausting to stack S-9.

(g) One (1) cylinder dryer, identified as CD-1, constructed in 1987, with a maximum capacity of 0.514 gallons per hour of paint and mineral spirits, equipped with a natural gas combustion source with a maximum capacity of 4 million British thermal units per hour, with emissions controlled by one (1) afterburner, identified as Afterburner 1, and exhausting to vent V-10.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) brushing chamber, identified as BC-1, constructed in 1992, with a maximum throughput of 0.587 pounds per hour, with emissions controlled by one (1) baghouse, identified as Baghouse 3, and exhausting to vent V-14 which discharges to the inside of the building.

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(1) One (1) natural gas-fired boiler, identified as B-1, constructed in 1990, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-1.

(2) One (1) natural gas-fired boiler, identified as B-2, constructed in 1992, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-2.

(3) One (1) natural gas-fired boiler, identified as B-3, constructed in 1995, with a maximum capacity of 2.5 million British thermal units per hour, and exhausting to stack S-3.

(4) One (1) natural gas-fired oil heater, identified as B-4, constructed in 1988, with a maximum capacity of 0.4 million British thermal units per hour, and exhausting to stack S-4.

(5) Eighteen (18) gas unit heaters.

(c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons: one (1) diesel storage tank.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized

individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ,. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

and

Northwest Regional Office Telephone No.: 219-881-6712
Northwest Regional Office Facsimile No.: 219-881-6745

Failure to notify IDEM, OAQ, and the Northwest Regional Office by telephone or facsimile within four (4) daytime business hours after the beginning of the

emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ , at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ , may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the

deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit any regulated pollutant from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;

(3) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(4) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-3 (Emission Offset), potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ,, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional thirty (30) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial thirty (30) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a flow rate or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no

less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so

long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) Four (4) rotary dyers, identified as RD-1, RD-2, RD-3, and RD-4, constructed in 1972, 1975, 1980, and 1982, respectively, with a maximum throughput of 198.63, 198.63, 135.83, and 135.83 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions from RD-1, RD-2, and RD-3 controlled by one (1) baghouse, identified as Baghouse 1, exhausting to stacks S-5, and with particulate emissions from RD-4 controlled by one (1) baghouse, identified as Baghouse 2, exhausting to stack S-6.

(b) Two (2) rotary dryers, identified as RD-5 and RD-6, constructed in 1987 and 1990, respectively, each with a maximum throughput of 135.83 pounds per hour, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions controlled by one (1) baghouse, identified as Baghouse 2, and exhausting to stack S-6.

(c) Two (2) fusion reactors, identified as FR-1 and FR-2, constructed in 1997 and 2000, respectively, with a maximum throughput of 180.29 and 600.96 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 1.45 and 1.66 million British thermal units per hour, respectively, with emissions controlled by two (2) scrubbers, identified as Scrubber 1 and Scrubber 2, and exhausting to stacks S-7 and S-8, respectively.

(d) Two (2) tin chloride manufacturing lines, identified as Mfg-1 and Mfg-2, constructed in 1987 and 1986, respectively, with a maximum throughput of 5.82 and 2.74 pounds per hour, respectively, with emissions controlled by two (2) scrubbers, identified as Scrubber 3 and Scrubber 4, and exhausting to stacks S-11 and S-12.

(e) One (1) tin sulfate manufacturing line in the R&D Department, identified as Mfg-3, constructed in 1991, with a maximum throughput of 2.74 pounds per hour, with emissions controlled by one (1) scrubber, identified as Scrubber 5, and exhausting to stack S-13.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations), particulate matter (PM) emissions from the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6), fusion reactors (FR-1 and FR-2) and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) shall be limited to 0.03 grain per dry standard cubic foot. This limitation is equivalent to the following emissions:

Unit	PM Limit (lb/hr)	PM Limit (ton/yr)
RD-1, RD-2, RD-3 Combined	4.17	18.45
RD-4, RD-5, RD-6 Combined	4.5	19.71
FR-1	1.03	4.51
FR-2	1.03	4.51

Unit	PM Limit (lb/hr)	PM Limit (ton/yr)
Mfg-1	4.37	19.15
Mfg-2	2.06	9.01
Mfg-3	2.06	9.01

D.1.2 Particulate Matter [326 IAC 2-8] [326 IAC 2-2] [40 CFR 52.21]

The Permittee shall be subject to the following limitations:

Unit	PM Limit (lb/hr)	PM10 Limit (lb/hr)	PM Limit (ton/yr)	PM10 Limit (ton/yr)
RD-1, RD-2, RD-3 Combined	2.78	2.78	12.16	12.16
RD-1, RD-2, RD-3 Combined	3.00	3.00	13.14	13.14
FR-1	1.03	1.03	4.51	4.51
FR-2	1.03	1.03	4.51	4.51
Mfg-1	4.37	4.37	19.15	19.15
Mfg-2	2.06	2.06	9.01	9.01
Mfg-3	2.06	2.06	9.01	9.01

These limits are equivalent to emissions of less than 71.49 tons per year of PM and less than 71.49 tons of PM10 from RD-1, RD-2, RD-3, RD-4, RD-5, RD-6, FR-1, FR-2, Mfg-1, Mfg-2, and Mfg-3 combined. These limits are structured such that, when including the uncontrolled PM and PM10 emissions from PB-1, CD-1, BC-1, and insignificant combustion, the source total PM emissions are less than two hundred fifty (250) tons per year and the source total PM10 emissions are less than one hundred (100) tons per year. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program), 326 IAC 2-2 (Prevention of Significant Deterioration), and 40 CFR 52.21 not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

In order to comply with Condition D.1.1 and D.1.2, the baghouses (Baghouse 1 and Baghouse 2) and scrubbers (Scrubber 1 through Scrubber 5) for PM control shall be in operation and control emissions from the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6), fusion reactors (FR-1 and FR-2), and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) at all times that the facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.5 Visible Emissions Notations

(a) Once per shift visible emission notations of the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6), fusion reactors (FR-1 and FR-2), and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) stack exhaust shall be performed during normal daylight operations when

exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the Baghouse 1 and Baghouse 2 used in conjunction with the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6), at least once per shift when the rotary dryers are in operation. When for any one reading, the pressure drop across the baghouses are outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6). All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.9 Scrubber Parametric Monitoring

The Permittee shall monitor and record the acid content, pressure drop, and flow rate of each of the scrubbers (Scrubber 1 through Scrubber 5), at least once per shift when the associated fusion reactors (FR-1 and FR-2) and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) are in operation. When for any one reading, the pressure drop across any of the scrubbers is outside the normal range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of any of the scrubbers is less than the normal minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the acid content of any of the scrubbers is above the normal maximum pH level established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range, a flow rate that is below the above mentioned minimum, or an acid content above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rate, and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.10 Scrubber Inspections

An inspection shall be performed each calendar quarter of each scrubber (Scrubber 1 through Scrubber 5) controlling the fusion reactors (FR-1 and FR-2) and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3). Inspections are optional when venting to the indoors.

D.1.11 Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.12 Record Keeping Requirements

(a) To document compliance with Condition D.1.5 the Permittee shall maintain records of visible emission notations of the stack exhaust once per shift.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain per shift records of the inlet and outlet differential static pressure during normal operation.

(c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.

(d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the following operational parameters for each scrubber once per shift during normal operation:

(1) pressure drop;

(2) flow rate; and

(3) acid content (pH level).

(e) To document compliance with Conditions D.1.7 and D.1.10, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.7 and D.1.10.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(f) One (1) paint booth, identified as PB-1, constructed in 1992, coating fiber and plastic drums and cylinders, with particulate emissions controlled by dry filters, and exhausting to stack S-9.

(g) One (1) cylinder dryer, identified as CD-1, constructed in 1987, with a maximum capacity of 0.514 gallons per hour of paint and mineral spirits, equipped with a natural gas combustion source with a maximum capacity of 4 million British thermal units per hour, with emissions controlled by one (1) afterburner, identified as Afterburner 1, and exhausting to vent V-10.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4][326 IAC 2-3]

The input volatile organic compounds (VOC) including coatings, thinners, and cleaners delivered to the paint booth (PB-1) and cylinder dryer (CD-1) combined shall be limited to less than twenty-four (24) tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that when including emissions from combustion, the source total VOC emissions remain below twenty-five (25) tons per year. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-3 (Emission Offset) not applicable.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-7]

The input of volatile organic compounds (VOC) including coatings, thinners, and cleaners delivered to the paint booth (PB-1) shall be limited to less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit renders the requirements of 326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties) not applicable.

D.2.3 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations), particulate matter (PM) emissions from the paint booth (PB-1) and cylinder dryer (CD-1) shall be limited to 0.03 grains per dry standard cubic foot.

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.2.5 Particulate Matter (PM)

In order to comply with Condition D.2.3, the dry filters for PM control shall be in operation at all times when the paint booth (PB-1) is in operation.

D.2.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.2.1 and D.2.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.2.7 VOC Emissions

Compliance with Conditions D.1.1 and D.2.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the month.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.8 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack S-9 while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Preparation, Implementation, Records, and Reports in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.9 Record Keeping Requirements

(a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.2.1 and D.2.2.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The volume weighted VOC content of the coatings used for each month;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Condition D.2.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

(a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) brushing chamber, identified as BC-1, constructed in 1992, with a maximum throughput of 0.587 pounds per hour, with emissions controlled by one (1) baghouse, identified as Baghouse 3, and exhausting to vent V-14 which discharges to the inside of the building.

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(1) One (1) natural gas-fired boiler, identified as B-1, constructed in 1990, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-1.

(2) One (1) natural gas-fired boiler, identified as B-2, constructed in 1992, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-2.

(3) One (1) natural gas-fired boiler, identified as B-3, constructed in 1995, with a maximum capacity of 2.5 million British thermal units per hour, and exhausting to stack S-3.

(4) One (1) natural gas-fired oil heater, identified as B-4, constructed in 1988, with a maximum capacity of 0.4 million British thermal units per hour, and exhausting to stack S-4.

(5) Eighteen (18) gas unit heaters.

(c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons: one (1) diesel storage tank.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-1-2]

(a) Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations), particulate matter (PM) emissions from the brushing chamber (BC-1) shall be limited to 0.03 grain per dry standard cubic foot. The baghouse for particulate control shall be in operation at all times that the brushing chamber is in operation in order to ensure compliance with this condition.

(b) Pursuant to 326 IAC 6-1-2(b), the particulate emissions from each of the boilers shall be no greater than one-hundredth (0.01) grain per dry standard cubic foot (dscf).

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-9]

The diesel storage tank is subject to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels), but no specific emission limitations exist pursuant to this rule. Record keeping and reporting requirements do apply and they are described below in the Record Keeping and Reporting Requirements section.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.3 Record Keeping Requirements

(a) Pursuant to 326 IAC 8-9, the owner or operator of diesel storage tank shall maintain a record and submit to IDEM, OAQ a report containing the following information for each vessel:

(1) The vessel identification number;

(2) The vessel dimensions; and

(3) The vessel capacity.

The records shall be maintained for the life of the vessel.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Mason Corporation
Source Address: 1049 U.S. Highway 41, Schererville, Indiana 46375
Mailing Address: P.O. Box 38, Schererville, Indiana 46375
FESOP No.: F089-15312-00094

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Mason Corporation
Source Address: 1049 U.S. Highway 41, Schererville, Indiana 46375
Mailing Address: P.O. Box 38, Schererville, Indiana 46375
FESOP No.: F089-15312-00094

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Mason Corporation
Source Address: 1049 U.S. Highway 41, Schererville, Indiana 46375
Mailing Address: P.O. Box 38, Schererville, Indiana 46375
FESOP No.: F089-15312-00094
Facility: Paint Booth (PB-1) and Cylinder Dryer (CD-1) combined
Parameter: VOC Input
Limit: Less than 24 tons per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Mason Corporation
Source Address: 1049 U.S. Highway 41, Schererville, Indiana 46375
Mailing Address: P.O. Box 38, Schererville, Indiana 46375
FESOP No.: F089-15312-00094
Facility: Paint Booth (PB-1)
Parameter: VOC Input
Limit: Less than 10 tons per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

NDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Mason Corporation
Source Address: 1049 U.S. Highway 41, Schererville, Indiana 46375
Mailing Address: P.O. Box 38, Schererville, Indiana 46375
FESOP No.: F089-15312-00094

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

November 25, 2002

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for Federally Enforceable State Operating Permit (FESOP

Source Background and Description

Source Name:	Mason Corporation
Source Location:	1049 U.S. Highway 41, Schererville, Indiana 46375
County:	Lake
SIC Code:	2819
Operation Permit No.:	F089-15312-00094
Permit Reviewer:	ERG/KC

On October 11, 2002, the Office of Air Quality (OAQ) had a notice published in the Post Tribune and The Times, Merriville and Munster, Indiana, stating that Mason Corporation had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a source manufacturing tin chloride and tin sulfate with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 3, 2002, Mason Corporation submitted an application to add two (2) baghouses and two (2) scrubbers. The FESOP application stated that RD-1, RD-2, and RD-3 exhausted to Baghouse #1 and RD-4, RD-5, and RD-6 exhausted to Baghouse #2. As part of the October 3, 2002 application, RD-1 and RD-2 will continue to exhaust to Baghouse #2, RD-5 and RD-6 will continue to exhaust to Baghouse #3, RD-3 will exhaust to a new Baghouse #4, and RD-4 will exhaust to a new Baghouse #5. A new scrubber, Scrubber #6 will be added to control emissions from FR-1 and FR-2. Scrubber #1 currently controls emissions from FR-1 and Scrubber #2 currently controls emissions from FR-2. These scrubber will remain in operation. A new scrubber, Scrubber #7 will be added to control emissions from Mfg-1 and Mfg-2. These emissions are currently controlled by, and will continue to be controlled by, Scrubber #3 and Scrubber #4. The following changes were made in order to incorporate the changes from the October 3, 2002 application. Text will a line through it was removed and bold text was added. The Table of Contents was updated as needed.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) ~~Four (4)~~**Two (2)** rotary dryers, identified as RD-1~~, RD-2, RD-3,~~ and ~~RD-4~~**RD-2**, constructed in 1972~~,~~ **and** 1975, ~~1980, and 1982,~~ respectively, **each** with a maximum throughput of 198.63~~, 198.63, 135.83, and 135.83~~ pounds per hour, ~~respectively,~~ each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions ~~from RD-1, RD-2, and RD-3~~ controlled by one (1) baghouse, identified as Baghouse #1, exhausting to stack S-5~~, and with particulate~~

~~emissions from RD-4 controlled by one (1) baghouse, identified as Baghouse 2, exhausting to stack S-6~~.

(b) Two (2) rotary dryers, identified as RD-3 and RD-4, constructed in 1980 and 1982, respectively, each with a maximum throughput of 135.83 pounds per hour, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions controlled by two (2) baghouses, identified as Baghouse #4 and Baghouse #5, respectively, exhausting to Stack S-15 and S-16, respectively.

(~~b~~**c**) Two (2) rotary dryers, identified as RD-5 and RD-6, constructed in 1987 and 1990, respectively, each with a maximum throughput of 135.83 pounds per hour, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions controlled by one (1) baghouse, identified as Baghouse #2, and exhausting to stack S-6.

(~~c~~**d**) Two (2) fusion reactors, identified as FR-1 and FR-2, constructed in 1997 and 2000, respectively, with a maximum throughput of 180.29 and 600.96 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 1.45 and 1.66 million British thermal units per hour, respectively, with emissions controlled by ~~two (2)~~ **three (3)** scrubbers, identified as Scrubber #1**,** Scrubber #2, **and Scrubber #6,** and exhausting to stacks S-7**,** ~~and~~ S-8, **and S-17,** respectively.

(~~d~~**e**) Two (2) tin chloride manufacturing lines, identified as Mfg-1 and Mfg-2, constructed in 1987 and 1986, respectively, with a maximum throughput of 5.82 and 2.74 pounds per hour, respectively, with emissions controlled by ~~two (2)~~ **three (3)** scrubbers, identified as Scrubber #3**,** ~~and~~ Scrubber #4, **and Scrubber #7,** and exhausting to stacks S-11**,** ~~and~~ S-12**, and S-18**.

(~~e~~**f**) One (1) tin sulfate manufacturing line in the R&D Department, identified as Mfg-3, constructed in 1991, with a maximum throughput of 2.74 pounds per hour, with emissions controlled by one (1) scrubber, identified as Scrubber #5, and exhausting to stack S-13.

(~~f~~**g**) One (1) paint booth, identified as PB-1, constructed in 1992, coating fiber and plastic drums and cylinders, with particulate emissions controlled by dry filters, and exhausting to stack S-9.

(~~g~~**h**) One (1) cylinder dryer, identified as CD-1, constructed in 1987, with a maximum capacity of 0.514 gallons per hour of paint and mineral spirits, equipped with a natural gas combustion source with a maximum capacity of 4 million British thermal units per hour, with emissions controlled by one (1) afterburner, identified as Afterburner 1, and exhausting to vent V-10.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) ~~Four (4)~~**Two (2)** rotary dryers, identified as RD-1~~, RD-2, RD-3,~~ and ~~RD-4~~ **RD-2**, constructed in 1972~~,~~ **and** 1975, ~~1980, and 1982,~~ respectively, **each** with a maximum throughput of 198.63~~, 198.63, 135.83, and 135.83~~ pounds per hour, ~~respectively,~~ each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions ~~from RD-1, RD-2, and RD-3~~ controlled by one (1) baghouse, identified as Baghouse #1, exhausting to stack S-5~~, and with particulate emissions from RD-4 controlled by one (1) baghouse, identified as Baghouse 2, exhausting to stack S-6~~.

(b) Two (2) rotary dryers, identified as RD-3 and RD-4, constructed in 1980 and 1982, respectively, each with a maximum throughput of 135.83 pounds per hour, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions controlled by two (2) baghouses, identified as Baghouse #4 and Baghouse #5, exhausting to Stack S-15 and S-16, respectively.

(~~b~~**c**) Two (2) rotary dryers, identified as RD-5 and RD-6, constructed in 1987 and 1990, respectively, each with a maximum throughput of 135.83 pounds per hour, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions controlled by one (1) baghouse, identified as Baghouse #2, and exhausting to stack S-6.

(~~c~~**d**) Two (2) fusion reactors, identified as FR-1 and FR-2, constructed in 1997 and 2000, respectively, with a maximum throughput of 180.29 and 600.96 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 1.45 and 1.66 million British thermal units per hour, respectively, with emissions controlled by ~~two (2)~~ **three (3)** scrubbers, identified as Scrubber #1**,** Scrubber #2, **and Scrubber #6,** and exhausting to stacks S-7**,** ~~and~~ S-8, **and S-17,** respectively.

(~~d~~**e**) Two (2) tin chloride manufacturing lines, identified as Mfg-1 and Mfg-2, constructed in 1987 and 1986, respectively, with a maximum throughput of 5.82 and 2.74 pounds per hour, respectively, with emissions controlled by ~~two (2)~~ **three (3)** scrubbers, identified as Scrubber #3**,** ~~and~~ Scrubber #4, **and Scrubber #7,** and exhausting to stacks S-11**,** ~~and~~ S-12**, and S-18**.

(~~e~~**f**) One (1) tin sulfate manufacturing line in the R&D Department, identified as Mfg-3, constructed in 1991, with a maximum throughput of 2.74 pounds per hour, with emissions controlled by one (1) scrubber, identified as Scrubber #5, and exhausting to stack S-13.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations), particulate matter (PM) emissions from the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6), fusion reactors (FR-1 and FR-2) and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) shall be limited to 0.03 grain per dry standard cubic foot. This limitation is equivalent to the following emissions:

Unit	PM Limit (lb/hr)	PM Limit (ton/yr)
RD-1~~,~~ **and** RD-2~~, RD-3~~ Combined **(Baghouse #1, S-5)**	4.17	~~18.45~~ **18.25**
RD-3 and RD-4 Combined (Baghouse #4, S-15)	**2.06**	**9.01**
RD-3 and RD-4 Combined (Baghouse #5, S-16)	**2.06**	**9.01**
~~RD-4,~~ RD-5~~,~~ **and** RD-6 Combined **(Baghouse #2, S-6)**	4.5**0**	19.71
FR-1 **(Scrubber #1, S-7)**	1.03	4.51
FR-2 **(Scrubber #2, S-8)**	1.03	4.51
FR-1 and FR-2 Combined (Scrubber #6, S-17)	**1.03**	**4.51**
Mfg-1 **and Mfg-2 Combined (Scrubber #3, S-11)**	4.37	19.15
Mfg-1 and Mfg-2 Combined (Scrubber #4, S-12)	**2.06**	**9.01**
Mfg-1 and Mfg-2 **Combined (Scrubber #7, S-18)**	~~2.06~~ **1.03**	~~9.01~~ **4.51**
Mfg-3 **(Scrubber #5, S-13)**	~~2.06~~ **1.03**	~~9.01~~ **4.51**

D.1.2 Particulate Matter [326 IAC 2-8] [326 IAC 2-2] [40 CFR 52.21]

The Permittee shall be subject to the following limitations:

Unit	PM Limit (lb/hr)	PM10 Limit (lb/hr)	PM Limit (ton/yr)	PM10 Limit (ton/yr)
RD-1~~,~~ **and** RD-2~~, RD-3~~ Combined **(Baghouse #1, S-5)**	2.78	2.78	12.16	12.16
~~RD-1, RD-2,~~ RD-3 **and RD-4** Combined **(Baghouse #4 and #5, S-15 and S-16)**	~~3.00~~ **1.78**	~~3.00~~ **1.78**	~~13.14~~ **7.80**	~~13.14~~ **7.80**
RD-5 and RD-6 Combined (Baghouse #2, S-6)	**3.00**	**3.00**	**13.14**	**13.14**
FR-1 **(Scrubber #1 and #6, Stacks S-7 and S-17)**	~~1.03~~ **0.89**	~~1.03~~ **0.89**	~~4.51~~ **1.89**	~~4.51~~ **1.89**
FR-2 **(Scrubber #2 and #6, S-8 and S-17)**	~~1.03~~ **0.89**	~~1.03~~ **0.89**	~~4.51~~ **1.89**	~~4.51~~ **1.89**
Mfg-1 **and Mfg-2 Combined (Scrubber #3, #4, and #7, S-11, S-12, and S-18)**	~~4.37~~ **3.31**	~~4.37~~ **3.31**	~~19.15~~ **14.15**	~~19.15~~ **14.15**
~~Mfg-2~~	~~2.06~~	~~2.06~~	~~9.01~~	~~9.01~~
Mfg-3 **(Scrubber #5, S-13)**	~~2.06~~ **0.45**	~~2.06~~ **0.45**	~~9.01~~ **1.95**	~~9.01~~ **1.95**

These limits are equivalent to emissions of less than ~~71.49~~**57.00** tons per year of PM and less than ~~71.49~~**57.00** tons of PM10 from RD-1, RD-2, RD-3, RD-4, RD-5, RD-6, FR-1, FR-2, Mfg-1, Mfg-2, and

Mfg-3 combined. These limits are structured such that, when including the uncontrolled PM and PM10 emissions from PB-1, CD-1, BC-1, and insignificant combustion, the source total PM emissions are less than two hundred fifty (250) tons per year and the source total PM10 emissions are less than one hundred (100) tons per year. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program), 326 IAC 2-2 (Prevention of Significant Deterioration), and 40 CFR 52.21 not applicable.

D.1.4 Particulate Matter (PM)

In order to comply with Condition D.1.1 and D.1.2, the baghouses (Baghouse #1**,** ~~and~~ Baghouse #2**, Baghouse #4, and Baghouse #5**) and scrubbers (Scrubber #1 through Scrubber ~~5~~ #**7**) for PM control shall be in operation and control emissions from the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6), fusion reactors (FR-1 and FR-2), and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) at all times that the facilities are in operation.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the Baghouse #1**,** ~~and~~ Baghouse #2**, Baghouse #4, and Baghouse #5** used in conjunction with the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6), at least once per shift when the rotary dryers are in operation. When for any one reading, the pressure drop across the baghouses are outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.9 Scrubber Parametric Monitoring

The Permittee shall monitor and record the acid content, pressure drop, and flow rate of each of the scrubbers (Scrubber #1 through Scrubber ~~5~~ #**7**), at least once per shift when the associated fusion reactors (FR-1 and FR-2) and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) are in operation. When for any one reading, the pressure drop across any of the scrubbers is outside the normal range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of any of the scrubbers is less than the normal minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the acid content of any of the scrubbers is above the normal maximum pH level established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range, a flow rate that is below the above mentioned minimum, or an acid content above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the pressure, flow rate, and pH level shall comply with

Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.10 Scrubber Inspections

An inspection shall be performed each calendar quarter of each scrubber (Scrubber #1 through Scrubber ~~5~~ **#7**) controlling the fusion reactors (FR-1 and FR-2) and manufacturing lines (Mfg-1, Mfg-2, and Mfg-3). Inspections are optional when venting to the indoors.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(~~f~~ **g**) One (1) paint booth, identified as PB-1, constructed in 1992, coating fiber and plastic drums and cylinders, with particulate emissions controlled by dry filters, and exhausting to stack S-9.

(~~g~~ **h**) One (1) cylinder dryer, identified as CD-1, constructed in 1987, with a maximum capacity of 0.514 gallons per hour of paint and mineral spirits, equipped with a natural gas combustion source with a maximum capacity of 4 million British thermal units per hour, with emissions controlled by one (1) afterburner, identified as Afterburner 1, and exhausting to vent V-10.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. A general phone number is used because it is cumbersome to do a notice only change every time a contact person's phone number changes. "County Status" has been deleted; it was not removed previously when replaced by "Source Location Status" in order to clarify when only portions of a county are non-attainment. The following change was made to section A.1:

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary source manufacturing tin chloride and tin sulfate.

Authorized individual:	Plant Manager
Source Address:	1049 U.S. Highway 41, Schererville, Indiana 46375
Mailing Address:	P.O. Box 38, Schererville, Indiana 46375
General Source Phone:	**(219) 865-8040**
SIC Code:	2819
Source Location Status: Lake ~~County Status~~:	Nonattainment for SO_2 and ozone Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules 1 of 28 Source Categories Minor Source under Section 112 of the Clean Air Act

2. The term of permit rule cite was added to B.3 Permit Term. In order to avoid confusion for renewals

as to what "original" date we are referring to the following change has been made:

B.3 Permit Term [326 IAC 2-7-5(2)] **[326 IAC 2-1.1-9.5]**

This permit is issued for a fixed term of five (5) years from the ~~original~~ **issuance** date **of this permit**, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

3. Since B.8 (c) Duty to Supplement and Provide Information already addresses confidentiality, the last sentence of (b) was revised to remove the statement about confidential information, and (c) was updated for clarity. Also, the condition was revised to change a rule reference. Subpart (c) references 326 IAC 17. This rule was repealed by the Air Pollution Control Board on January 26, 2000. The new rule reference has been added as follows:

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit**.** ~~or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]~~

(c) **For information furnished by the Permittee to IDEM, OAQ,** the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.**1** When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

4. Condition B.10 Compliance with Permit Conditions was revised as follows:

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in ~~condition~~ **Section** B, Emergency Provisions.

5. Condition B.13 Preventive Maintenance Plan has been revised to clarify the extension of PMPs.

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The ~~PMP and the~~ PMP extension notification do**es** not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

6. The requirement to include emergencies in the Quarterly Deviation and Compliance Monitoring Report has been moved from B.15 to B.14. B.14 Emergency Provisions the statement at the end of (b)(4) has been removed, because this is stated again in (f).

B.14 Emergency Provisions [326 IAC 2-8-12]

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and the Northwest Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

and

Northwest Regional Office Telephone No.: 219-881-6712
Northwest Regional Office Facsimile No.: 219-881-6745

~~Failure to notify IDEM, OAQ, and the Northwest Regional Office, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]~~

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

7. Condition B.15(c) has been removed then revised and incorporated in B.12 Emergency Provisions.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

~~(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.~~

8. Condition B.18 Permit Amendment or Revision has been revised to replace "should" with "shall" in (b).

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application ~~should~~ **shall** be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

9. In order to be consistent with 326 IAC 2-8-15(a)(5) the rule cite has been revised in B.19(a)(5) B.19 Operational Flexibility. (b) has been removed, because this is a Part 70 requirement, but not a FESOP requirement.

B.19 Operational Flexibility [326 IAC 2-8-15]

(a) (5) The Permittee maintains records on-site which document, on a rolling five (5) year

basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ , in the notices specified in 326 IAC 2-8-15(b)**(2)**, (c)(1), and (d).

~~(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:~~

~~(1) A brief description of the change within the source;~~

~~(2) The date on which the change will occur;~~

~~(3) Any change in emissions; and~~

~~(4) Any permit term or condition that is no longer applicable as a result of the change.~~

~~The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.~~

(**b**~~c~~) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(**c**~~d~~) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

10. B.22 (c)Transfer of Ownership or Operational Control rule cite has been corrected.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-~~11~~**10**(b)(3)]

11. 326 IAC 2-1.1-7 specifies that nonpayment may result in revocation of the permit. This is not specified in 326 IAC 2-8; therefore, this rule cite is being added to B.23. Also, the section and phone number of who the Permittee can contact has been corrected in (c).

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] **[326 IAC 2-1.1-7]**

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-~~0425~~ **4320** (ask for OAQ, ~~Technical Support and Modeling Section~~ **I/M & Billing Section**), to determine the appropriate permit fee.

12. C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour has been added to the FESOP. All Section C conditions are renumbered.

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

13. The following was added to C.12 Compliance Requirements to state what OAQ does when stack testing, monitoring, or reporting is required to assure compliance with applicable requirements:

C.~~11~~**12** Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements **by issuing an order under 326 IAC 2-1.1-11.** Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

14. C.17 (e) Compliance Response Plan - Preparation, Implementation, Records, and Reports the rule cite was corrected.

C.~~16~~**17** Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of ~~326 IAC 2-7-16~~ **326 IAC 2-8-12** (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

15. C.21 (d) General Reporting Requirements has been revised to indicate all forms instead of the choice between quarterly or semi-annual.

C.~~20~~**21** General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(d) Unless otherwise specified in this permit, ~~any quarterly~~ **all** reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. ~~The~~ **All** reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

16. The first box on the Emergency Occurrence Report form was revised to include the word "working" in order to be consistent with 326 IAC 2-8-12(b)(5) and the Emergency Provision.

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) **working** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

November 25, 2002

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	Mason Corporation
Source Location:	1049 U.S. Highway 41, Schererville, Indiana 46375
County:	Lake
SIC Code:	2819
Operation Permit No.:	F089-15312-00094
Permit Reviewer:	ERG/KC

The Office of Air Quality (OAQ) has reviewed a FESOP application from Mason Corporation relating to the operation of a source manufacturing tin chloride and tin sulfate.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Four (4) rotary dryers, identified as RD-1, RD-2, RD-3, and RD-4, constructed in 1972, 1975, 1980, and 1982, respectively, with a maximum throughput of 198.63, 198.63, 135.83, and 135.83 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions from RD-1, RD-2, and RD-3 controlled by one (1) baghouse, identified as Baghouse 1, exhausting to stack S-5, and with particulate emissions from RD-4 controlled by one (1) baghouse, identified as Baghouse 2, exhausting to stack S-6.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(a) Two (2) rotary dryers, identified as RD-5 and RD-6, constructed in 1987 and 1990, respectively, each with a maximum throughput of 135.83 pounds per hour, each equipped with a natural gas combustion source with a maximum capacity of 0.75 million British thermal units per hour, with particulate emissions controlled by one (1) baghouse, identified as Baghouse 2, and exhausting to stack S-6.

(b) Two (2) fusion reactors, identified as FR-1 and FR-2, constructed in 1997 and 2000, respectively, with a maximum throughput of 180.29 and 600.96 pounds per hour, respectively, each equipped with a natural gas combustion source with a maximum capacity of 1.45 and 1.66 million British thermal units per hour, respectively, with emissions controlled by two (2) scrubbers, identified as Scrubber 1 and Scrubber 2, and exhausting to stacks S-7 and S-8, respectively.

(c) Two (2) tin chloride manufacturing lines, identified as Mfg-1 and Mfg-2, constructed in 1987 and 1986, respectively, with a maximum throughput of 5.82 and 2.74 pounds per hour, respectively, with emissions controlled by two (2) scrubbers, identified as Scrubber 3 and Scrubber 4, and exhausting to stacks S-11 and S-12.

(d) One (1) tin sulfate manufacturing line in the R&D Department, identified as Mfg-3, constructed in 1991, with a maximum throughput of 2.74 pounds per hour, with emissions controlled by one (1) scrubber, identified as Scrubber 5, and exhausting to stack S-13.

(e) One (1) paint booth, identified as PB-1, constructed in 1992, coating fiber and plastic drums and cylinders, with particulate emissions controlled by dry filters, and exhausting to stack S-9.

(f) One (1) cylinder dryer, identified as CD-1, constructed in 1987, with a maximum capacity of 0.514 gallons per hour of paint and mineral spirits, equipped with a natural gas combustion source with a maximum capacity of 4 million British thermal units per hour, with emissions controlled by one (1) afterburner, identified as Afterburner 1, and exhausting to vent V-10.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new emission units and pollution control equipment receiving advanced source modification approval at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) brushing chamber, identified as BC-1, constructed in 1992, with a maximum throughput of 0.587 pounds per hour, with emissions controlled by one (1) baghouse, identified as Baghouse 3, and exhausting to vent V-14 which discharges to the inside of the building.

(b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:

(1) One (1) natural gas-fired boiler, identified as B-1, constructed in 1990, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-1.

(2) One (1) natural gas-fired boiler, identified as B-2, constructed in 1992, with a maximum capacity of 3.5 million British thermal units per hour, and exhausting to stack S-2.

(3) One (1) natural gas-fired boiler, identified as B-3, constructed in 1995, with a maximum capacity of 2.5 million British thermal units per hour, and exhausting to stack S-3.

(4) One (1) natural gas-fired oil heater, identified as B-4, constructed in 1988, with a maximum capacity of 0.4 million British thermal units per hour, and exhausting to stack S-4.

(5) Eighteen (18) gas unit heaters.

(c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons: one (1) diesel storage tank.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

(a) CP089-2128-00094, issued on December 12, 1991;

(b) CP089-0094, issued on September 4, 1990;

(c) Exempt Operation Status, issued on April 7, 1983;

(d) Registered Construction and Operation Status, issued on October 18, 1982; and

(e) OP45-09-82-0301, issued on July 18, 1979.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this FESOP.

All construction conditions from all previously issued permits.

Reason Not Incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that Baghouse 1 and Baghouse 2 that control emissions from the six rotary dryers be considered as an integral part of the rotary dryers.

The two baghouses operate at all times that the rotary dryers are in operation and the primary purpose of the two baghouses is for product capture. Wet product enters the rotary dryers where it is dried. The product stream exiting the rotary dryers is in powder form. The whole product stream is transferred pneumatically to the baghouses which separates the air from the product. The product exiting the baghouses is collected and sold. Baghouse 1 captures product from RD-1, RD-2, and RD-3 and Baghouse 2 captures product from RD-4, RD-5, and RD-6. All of the product sold by the source is captured by the baghouses. Without the baghouses, there would be no product for the source to sell.

IDEM, OAQ has evaluated the justifications and agreed that Baghouse 1 and Baghouse 2 will be considered as an integral part of the rotary dryers. Therefore, the permitting level will be determined using the potential to emit after the two baghouses. Operating conditions in the proposed permit

will specify that Baghouse 1 and Baghouse 2 shall operate at all times when the rotary dryers are in operation.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively incomplete FESOP application for the purposes of this review was received on February 21, 2002. Additional information received on April 11, 2002 makes the FESOP application administratively complete.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1 through 7).

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before control. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	2,598.99
PM-10	2,598.99
SO_2	0.06
VOC	29.64
CO	7.91
NO_x	9.42

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Ethylene Glycol	1.28

HAP's	Potential To Emit (tons/year)
Chlorine	0.34
Benzene	1.978x10-4
Dichlorobenzene	1.131x10-4
Formaldehyde	7.066x10-3
Hexane	1.696x10-1
Toluene	3.203x10-4
Lead	4.711x10-5
Cadmium	1.036x10-4
Chromium	1.319x10-4
Manganese	3.580x10-5
Nickel	1.978x10-4
TOTAL	1.8

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than 25 tons per year of VOC and the source is located in Lake County. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
RD-1, RD-2, and RD-3	12.16[a]	12.16[a]	0	0	0	0	0
RD-4, RD-5, and RD-6	13.14[a]	13.14[a]	0	0	0	0	0
FR-1	4.51[b]	4.51[b]	0	0	0	0	Neg
FR-2	4.51[b]	4.51[b]	0	0	0	0	Neg
PB-1 and CD-1	3.74[c]	3.74[c]	0	Less than 24 combined (326 IAC 2-8) Less than 10 for the paint booth (326 IAC 8-7)	0	0	1.28
BC-1	2.57[c]	2.57[c]	0	0	0	0	0
Mfg-1, Mfg-2, and Mfg-3	37.17[b]	37.17[b]	0	0	0	0	0.13
Combustion	0.72	0.72	0.06	0.52	7.91	9.42	Neg
Total Emissions	78.52	78.52	0.06	Less than 25	7.91	9.42	1.5

[a] Emissions shown are after the integral baghouse as this permit requires that the integral baghouse operate at all times that the rotary dryers are operating. These units are also subject to 326 IAC 6-1-2 which limits PM emissions to less than 0.03 gr/dscf.
[b] Emissions are after control devices as this permit requires that the controls operate at all times that the units are in operation. These units are also subject to 326 IAC 6-1-2 which limits PM emissions to less than 0.03 gr/dscf.
[C] These units are subject to 326 IAC 6-1-2 which limits PM emissions to less than 0.03 gr/dscf.
Note: Combustion emissions are at maximum capacity.
Neg - Negligible

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Attainment
SO_2	Primary Nonattainment
NO_2	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone.

(b) Lake County has been classified as nonattainment for SO_2. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(c) Lake County has been classified as attainment or unclassifiable for NO_2, CO, and lead. Schererville is not located in Gary, East Chicago, Hammond or Whiting and has therefore been classified as attainment for PM_{10}. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(d) Fugitive Emissions
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR 60) applicable to this source. The natural gas fired boilers, identified as B-1, B-2, and B-3, are not subject to 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) even though they were constructed after 1989, the applicability date of this rule, because they each have capacities less than ten (10) million British thermal units per hour. Boiler B-4 is not subject to 40 CFR 60, Subpart Dc because it was constructed prior to the applicability date of the rule and has a capacity less than ten (10) million British thermal units per hour. The storage tanks are not subject to 40 CFR 60, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984) because they do not have capacities greater than forty (40) cubic meters.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

(a) This source is one of the 28 listed source categories under 326 IAC 2-2. The source-wide potential to emit of NOx is, and has been since startup, less than one hundred (100) tons per year. Therefore the source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(b) The source-wide potential to emit is, and has been since startup, of CO are less than one hundred (100) tons per year. Therefore the source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(c) The Permittee shall be subject to the following limitations:

Unit	PM Limit (lb/hr)	PM10 Limit (lb/hr)	PM Limit (ton/yr)	PM10 Limit (ton/yr)
RD-1, RD-2, RD-3 Combined	2.78	2.78	12.16	12.16
RD-1, RD-2, RD-3 Combined	3.00	3.00	13.14	13.14
FR-1	1.03	1.03	4.51	4.51
FR-2	1.03	1.03	4.51	4.51
Mfg-1	4.37	4.37	19.15	19.15
Mfg-2	2.06	2.06	9.01	9.01
Mfg-3	2.06	2.06	9.01	9.01

These limits are equivalent to emissions of less than 71.49 tons per year of PM and less than 71.49 tons of PM10 from RD-1, RD-2, RD-3, RD-4, RD-5, RD-6, FR-1, FR-2, Mfg-1, Mfg-2, and Mfg-3 combined. These limits are structured such that, when including the uncontrolled PM and PM10 emissions from PB-1, CD-1, BC-1, and insignificant combustion, the source total PM and PM10 emissions are less than two hundred fifty (250) tons per year. This renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

326 IAC 2-3 (Emission Offset)

(a) The input volatile organic compounds (VOC) including coatings, thinners, and cleaners delivered to the paint booth (PB-1) and cylinder dryer (CD-1) combined shall be limited to less than twenty-four (24) tons of VOC per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that when including emissions from combustion, the source total VOC emissions remain below twenty-five (25) tons per year. This renders the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

Although the paint booth (PB-1) and the cylinder dryer (CD-1) were both constructed without permits, neither of them triggered Emission Offset. The source was an existing minor source for Emission Offsets when the cylinder dryer (CD-1) was constructed in September 1987. It had and has the potential to emit 8.9 tons of VOC per year. Therefore the construction of this unit did not trigger Emission Offset. At this point, the source was still a minor source. The paint booth (PB-1) was constructed in July 1992 and had and has the potential to emit 20.7 tons of VOC per year. Therefore the construction of this unit did

not trigger Emission Offset. However, it did make the source a major source under Emission Offsets. As mentioned above, the source is now taking a limit to be a minor source under emission offsets. The only construction after the source became a major source was for two small boilers, one in 1992 and one in 1995, and for two fusion reactors, one in 1997 and one in 2000. These are all insignificant sources of regulated pollutants with the potential to emit much less than the levels required for exemption from permitting under 326 IAC 2-1.1-3(h)(2)(D) in total or as individual projects.

The actual VOC emissions from the cylinder dryer (CD-1) are 1 ton per year and the actual VOC emissions from the paint booth (PB-1) are 2.6 tons per year. The actual emissions from all of the combustion units at the source is negligible.

The following is a table showing the year of construction, the potential emissions (prior to the limit being applied in this permit), and the actual emissions from each VOC emitting facility:

Year of Construction	Unit	Potential Emissions of VOC (ton/yr)		Actual VOC Emissions (ton/yr)
		of Construction	Total	
1972	RD-1	0.02	0.02	Neg.
1975	RD-2	0.02	0.04	Neg.
1980	RD-3	0.02	0.06	Neg.
1982	RD-4	0.02	0.08	Neg.
1987	RD-5	0.02	0.10	Neg.
September 1987	CD-1	8.9	9.0	1
1988	B-4	0.01	9.01	Neg.
1990	RD-6	0.02	9.03	Neg.
1990	B-1	0.08	9.11	Neg.
July 1992	PB-1	20.7	29.81	2.6
1992	B-2	0.08	29.89	Neg.
1995	B-3	0.06	29.95	Neg.
1997	FR-1	0.03	29.98	Neg.
2000	FR-2	0.04	30.02	Neg.
Total		30.02		3.6

Based on this table, it is evident that the source did not violate 326 IAC 2-3 (Emission Offset).

(b) The source-wide potential emissions of sulfur dioxide are and have been since startup less than one hundred (100) ton per year. Therefore the source is not subject to the requirements of 326 IAC 2-3 (Emission Offset).

326 IAC 2-4.1-1 (New Sources of Hazardous Air Pollutants)

This source has the potential to emit less than 10 tons per year of a single HAP and less than 25 tons per year of any combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and is located in Lake County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 2-8-4 (FESOP)

(a) The input volatile organic compounds (VOC) including coatings, thinners, and cleaners delivered to the paint booth (PB-1) and cylinder dryer (CD-1) combined shall be limited to less than twenty-four (24) tons of VOC per twelve (12) consecutive month period. This limit is structured such that when including emissions from combustion, the source total VOC limits remain below twenty-five (25) tons per year. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

(b) The Permittee shall be subject to the following limitations:

Unit	PM10 Limit (lb/hr)	PM10 Limit (ton/yr)
RD-1, RD-2, RD-3 Combined	2.78	12.16
RD-1, RD-2, RD-3 Combined	3.00	13.14
FR-1	1.03	4.51
FR-2	1.03	4.51
Mfg-1	4.37	19.15
Mfg-2	2.06	9.01
Mfg-3	2.06	9.01

These limits are equivalent to emissions of less than 71.49 tons of PM10 from RD-1, RD-2, RD-3, RD-4, RD-5, RD-6, FR-1, FR-2, Mfg-1, Mfg-2, and Mfg-3 combined. These limits are structured such that, when including the uncontrolled PM10 emissions from PB-1, CD-1, BC-1, and insignificant combustion, the source total PM10 emissions are less than one hundred (100) tons per year. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

326 IAC 5-1 (Opacity Limitations)

326 IAC 5-1-2 (Opacity Limitations) applies to this sources because the source is in Lake County in an area bounded on the north by Lake Michigan, on the west by the Indiana-Illinois state line, on the south by U.S. 30 form the state line to the intersection of I-65 to the intersection of I-94 then following I-94 to the Lake-Porter County line, and on the east by the Lake-Porter County line. Pursuant to this rule, except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-2 (Particulate Emission Limitations)

326 IAC 6-1-2 (Particulate Emission Limitations) applies to this source because this source is located in Lake county which is listed in section 7 of this rule, this source is not specifically listed in section 10, and the source has actual emissions greater than ten (10) tons per year of particulate matter. Pursuant to this rule, the discharge of any gases from the source which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.3 grain per dry standard cubic foot (dscf)) shall not be allowed.

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements) does not apply to this source even though it is in Lake County because Mason Corporation is not specifically listed in this section.

326 IAC 6-1-10.2 (Lake County PM10 Coke Battery Emission Requirements)

326 IAC 6-1-10.2 (Lake County PM10 Coke Battery Emission Requirements) does not apply to this source even though it is in Lake County because there is no coke battery at the site.

326 IAC 6-1-11.1 (Lake County Particulate Matter Contingency Measures)

326 IAC 6-1-11.1 (Lake County Particulate Matter Contingency Measures) does not apply to this source because the source does not have the potential to emit greater than five (5) tons per year of fugitive particulate matter into the atmosphere. The requirements for this rule are covered in Condition C.6 of the permit.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures) applies to this source because it has the potential to emit greater than ten (10) tons per year of PM10.

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations)

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations) does not apply to this source because the source does not have the potential to emit greater than twenty-five (25) tons per year of SO_2 and therefore is not subject to 326 IAC 7-1.1.

State Rule Applicability - Rotary Dryers

326 IAC 6-1-2 (Particulate Emission Limitations)

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), the discharge of any gases from the rotary dryers (RD-1, RD-2, RD-3, RD-4, RD-5, and RD-6) which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.3 grain per dry standard cubic foot (dscf)) shall not be allowed. This limitation is equivalent to the following emissions:

Unit	PM Limit (lb/hr)	PM Limit (ton/yr)
RD-1, RD-2, RD-3 Combined	4.17	18.45
RD-4, RD-5, RD-6 Combined	4.5	19.71

The information provided by the source on Baghouse 1 and Baghouse 2, which control emissions from the rotary dryers, indicates that these units are in compliance with this requirement.

Article 8 (Volatile Organic Compounds)

These facilities emit negligible quantities of VOC. Under 326 IAC 8-1-1(b), when actual emissions are less than fifteen (15) pounds per day, no Article 8 (Volatile Organic Compounds) rules apply.

State Rule Applicability - Fusion Reactors

326 IAC 6-1-2 (Particulate Emission Limitations)

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), the discharge of any gases from the fusion reactors (FR-1 and FR-2) which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.3 grain per dry standard cubic foot (dscf)) shall not be allowed. This limitation is equivalent to the following emissions:

Unit	PM Limit (lb/hr)	PM Limit (ton/yr)
FR-1	1.03	4.51
FR-2	1.03	4.51

The information provided by the source on Scrubber 1 and Scubber 2, which control emissions from the fusion reactors, indicates that these units are in compliance with this requirement.

Article 8 (Volatile Organic Compounds)

These facilities emit negligible quantities of VOC. Under 326 IAC 8-1-1(b), when actual emissions are less than fifteen (15) pounds per day, no Article 8 (Volatile Organic Compounds) rules apply.

State Rule Applicability - Paint Booth and Cylinder Dryer

326 IAC 6-1-2 (Particulate Emission Limitations)

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), the discharge of any gases from the paint booth (PB-1) or cylinder dryer (CD-1) which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.3 grain per dry standard cubic foot (dscf)) shall not be allowed.

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply to the paint booth (PB-1) or the cylinder dryer (CD-1) even though they were both constructed after January 1, 1980 because they do not individually have the potential to emit greater than twenty-five (25) tons per year of VOC.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

326 IAC 8-2-9 (Miscellaneous Metal Coating) does not apply to the paint booth (PB-1) because the paint booth does not coat metal objects.

326 IAC 8-6 (Organic Solvent Emission Limitations)

326 IAC 8-6 (Organic Solvent Emission Limitations) does not apply to the paint booth (PB-1) or cylinder dryer (CD-1) because these units were constructed after January 1, 1980 and the source does not have the potential to emit greater than one hundred (100) tons per year of VOC.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties) does not apply to the paint booth (PB-1) even though the paint booth is in Lake County because the potential emissions from the paint booth are limited to less than ten (10) tons per year.

State Rule Applicability - Manufacturing Lines

326 IAC 6-1-2 (Particulate Emission Limitations)

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), the discharge of any gases from the manufacturing lines (Mfg-1, Mfg-2, and Mfg-3) which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.3 grain per dry standard cubic foot (dscf)) shall not be allowed. This limitation is equivalent to the following emissions:

Unit	PM Limit (lb/hr)	PM Limit (ton/yr)
Mfg-1	4.37	19.15
Mfg-2	2.06	9.01
Mfg-3	2.06	9.01

The information provided by the source on Scrubber 3, Scrubber 4, and Scrubber 5, which control emissions from the manufacturing lines, indicates that these units are in compliance with this requirement.

Article 8 (Volatile Organic Compounds)

These facilities emit negligible quantities of VOC. Under 326 IAC 8-1-1(b), when actual emissions are less than fifteen (15) pounds per day, no Article 8 (Volatile Organic Compounds) rules apply.

State Rule Applicability - Insignificant Brushing Chamber

326 IAC 6-1-2 (Particulate Emission Limitations)

Pursuant to 326 IAC 6-1-2 (Particulate Emission Limitations), the discharge of any gases from the brushing chamber (BC-1) which contain particulate matter in excess of 0.07 gram per dry standard cubic meter (g/dscm) (0.3 grain per dry standard cubic foot (dscf)) shall not be allowed.

The information provided by the source on Baghouse 3, which controls emissions from the brushing chamber, indicates that this unit is in compliance with this requirement.

State Rule Applicability - Insignificant Boilers

326 IAC 6-1-2(b) (Particulate Emission Limitations: Fuel Combustion Steam Generators)

326 IAC 6-1-2(b) (Particulate Emission Limitations: Fuel Combustion Steam Generators) applies to B-1, B-2, B-3, and B-4 because this source is located in Lake county which is listed in section 7 of this rule, this source is not specifically listed in section 10, and the source has actual emissions greater than ten (10) tons per year of particulate matter. Pursuant to 326 IAC 6-1-2(b), the particulate emissions from each of the boilers shall be no greater than one-hundredth (0.01) grain per dry standard cubic foot (dscf).

State Rule Applicability - Insignificant Diesel Storage Tank

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities) does not apply to the insignificant diesel storage tank because it has a capacity less than 39,000 gallons.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels), the source is not subject to any specific emission limitations because the capacity of the insignificant diesel storage tank is less than 39,000 gallons. However, some record keeping and reporting requirements are required and these are documented in the permit.

Testing Requirements

Testing is not required for the rotary dryers, fusion reactors, brushing chamber, or manufacturing lines because these units do not individually have the potential to emit greater than forty percent (40%) of the source's total potential to emit of PM before controls. Additionally, only 326 IAC 6-1-2 applies to these units and there is no evidence that the units are not in compliance with this rule. Testing would not provide any additional information.

Testing is not required for the paint booth or cylinder dryer because compliance with 326 IAC 2-8-4 can be determined through record keeping and reporting of VOC input. Testing would not provide any additional information to aid in compliance determination.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The rotary dryers, fusion reactors, and manufacturing lines have applicable compliance monitoring conditions as specified below:

   (a) Once per shift visible emissions notations of the rotary dryers, fusion reactors, and manufacturing lines stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

   (b) The Permittee shall record the total static pressure drop across Baghouse 1 and Baghouse 2 controlling the rotary dryers, at least once per shift when the rotary dryers are in operation. When for any one reading, the pressure drop across the baghouses are outside the normal range of 3.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan-Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) An inspection shall be performed each calender quarter of all bags controlling the rotary dryers. All defective bags shall be replaced.

(d) The Permittee shall monitor and record the acid content, pressure drop, and flow rate of each of the scrubbers, at least once per shift when the associated fusion reactors and manufacturing lines are in operation. When for any one reading, the pressure drop across any of the scrubbers is outside the normal range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of any of the scrubbers is less than the normal minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the acid content of any of the scrubbers is above the normal maximum pH level established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range, a flow rate that is below the above mentioned minimum, or an acid content above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

(e) An inspection shall be performed each calendar quarter of each scrubber controlling the fusion reactors and manufacturing lines.

These monitoring conditions are necessary because the baghouses and scrubbers for the rotary dryers, fusion reactors, and manufacturing lines must operate properly to ensure compliance with 326 IAC 6-1-2 (Particulate Emission Limitations) and 326 IAC 2-8 (FESOP).

2. The paint booth has applicable compliance monitoring conditions as specified below:

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack S-9 while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Preparation, Implementation, Records, and Reports in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

These monitoring conditions are necessary because the dry filters for the paint booth must operate properly to ensure compliance with 326 IAC 6-1-2 (Particulate Emission Limitations) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of a source manufacturing tin chloride and tin sulfate shall be subject to the conditions of the attached proposed FESOP No.: F089-15312-00094.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **Mason Corporation**
Address City IN Zip: **1049 U.S. Highway 41, Schererville, IN 46375**
Permit Number: **089-15312-00094**
Plt ID: **089-00094**
Reviewer: **ERG/KC**
Date: **4/11/02**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
21.5	188.4

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.72	0.72	0.06	9.42	0.52	7.91

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: **Mason Corporation**
Address City IN Zip: **1049 U.S. Highway 41, Schererville, IN 46375**
Permit Number: **089-15312-00094**
Plt ID: **089-00094**
Reviewer: **ERG/KC**
Date: **4/11/02**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.978E-04	1.131E-04	7.066E-03	1.696E-01	3.203E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.711E-05	1.036E-04	1.319E-04	3.580E-05	1.978E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Particulate Emissions from the Rotary Dryers
Company Name: Mason Corporation
Address City IN Zip: 1049 U.S. Highway 41, Schererville, IN 46375
Permit Number: 089-15312-00094
Plt ID: 089-00094
Reviewer: ERG/KC
Date: 4/11/02

Particulate Emissions from the Six Rotary Dryers

Unit	Control Device	Air Flow Rate (acfm)	Grain Loading (grain/ascf)	Control Efficiency (%)	Uncontrolled PM Emissions (ton/yr)*	Controlled PM Emissions (ton/yr)**
RD-1	Baghouse 1	16,200	0.02	99.00%	1216.39	12.16
RD-2						
RD-3						
RD-4	Baghouse 2	17,500	0.02	99.00%	1314.00	13.14
RD-5						
RD-6						

* Uncontrolled PM Emissions (ton/yr) = Air Flow Rate (acfm) * Grain Loading (gr/ascf) / 7000 (gr/lb) * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton) / (1 - Control Efficiency)
** Controlled PM Emissions (ton/yr) = Air Flow Rate (acfm) * Grain Loading (gr/ascf) / 7000 (gr/lb) * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Appendix A: Emission Calculations
Emissions from the Fusion Reactors
Company Name: Mason Corporation
Address City IN Zip: 1049 U.S. Highway 41, Schererville, IN 46375
Permit Number: 089-15312-00094
Plt ID: 089-00094
Reviewer: ERG/KC
Date: 4/11/02

Particulate Emissions from the Two Fusion Reactors

Unit	Control Device	Air Flow Rate (acfm)	Grain Loading (gr/dscf)	Control Efficiency (%)	Uncontrolled PM Emissions (ton/yr)*	Controlled PM Emissions (ton/yr)**
FR-1	Scrubber 1	4,000	0.02	50.00%	6.01	3.00
FR-2	Scrubber 2	4,000	0.02	50.00%	6.01	3.00

* Uncontrolled PM Emissions (ton/yr) = Air Flow Rate (acfm) * Grain Loading (gr/ascf) / 7000 (gr/lb) * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton) / (1 - Control Efficiency)
** Controlled PM Emissions (ton/yr) = Air Flow Rate (acfm) * Grain Loading (gr/ascf) / 7000 (gr/lb) * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Chlorine Emissions from the Two Fusion Reactors

Unit	Control Device	Air Flow Rate (acfm)	Exhaust Density (lb/dscf)	Concentration (ppm)	Control Efficiency (%)	Uncontrolled Chlorine Emissions (ton/yr)*	Controlled Chlorine Emissions (ton/yr)**
FR-1	Scrubber 1	4,000	0.08	0.2	50.00%	0.03	0.02
FR-2	Scrubber 2	4,000	0.08	0.2	50.00%	0.03	0.02

* Uncontrolled Chlorine Emissions (ton/yr) = Air Flow Rate (acfm) * Exhaust Density (lb/ascf) * Concentration (ppm) / 10^6 * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton) / (1 - Control Efficiency)
** Controlled Chlorine Emissions (ton/yr) = Air Flow Rate (acfm) * Exhaust Density (lb/ascf) * Concentration (ppm) / 10^6 * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Appendix A: Emission Calculations
Emissions from the Cylinder Dryer and Paint Booth
Company Name: Mason Corporation
Address City IN Zip: 1049 U.S. Highway 41, Schererville, IN 46375
Permit Number: 089-15312-00094
Plt ID: 089-00094
Reviewer: ERG/KC
Date: 4/11/02

Paint VOC Emissions from Paint Booth and Cylinder Dryer

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Paint	8.84	41.50%	0.08%	41.42%	0.00%	42.60%	0.04400	15.000	3.66	3.66	2.42	58.00	10.58	3.74	8.60	75%

NOTE: It is assumed that 70% of the VOC is emitted by the paint booth and 30% is emitted by the cylinder dryer.
Methodology
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Paint HAP Emissions from Paint Booth and Cylinder Dyer

Material	Density (lb/gal)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Weight % Ethylene Glycol	Ethylene Glycol Emissions (ton/yr)
Paint	8.84	0.0440	15.00	5.00%	1.28

NOTE: It is assumed that 70% of the VOC is emitted by the paint booth and 30% is emitted by the cylinder dryer.
Methodology
HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Mineral Spirit VOC Emissions from the Cylinder Dryer and Paint Booth

Unit	Coating	Solids Mass Fraction	Material Density (lb/gal)	Maximum Capacity (gal/yr)	Percent Emitted (%)	Uncontrolled VOC Emissions (ton/yr)*
CD-1	Mineral Spirits	1.000	6.35	6,000	30.00%	5.72
PB-1	Mineral Spirits	1.000	6.35	6,000	70.00%	13.34

* Uncontrolled VOC Emissions (ton/yr) = Solids Mass Fraction * Material Density (lb/gal) *
Maximum Capacity (gal/yr) * Percent Emitted (%) / 2000 (lb/ton)

Appendix A: Emission Calculations
Emissions from the Brushing Chamber
Company Name: Mason Corporation
Address City IN Zip: 1049 U.S. Highway 41, Schererville, IN 46375
Permit Number: 089-15312-00094
Plt ID: 089-00094
Reviewer: ERG/KC
Date: 4/11/02

Particulate Emissions from the Brushing Chamber

Unit	Density of Solids (lb/gal)	Maximum Number of Drums Removed per Year	Drum Capacity (gal)	Control Efficiency (%)	Uncontrolled PM Emissions (ton/yr)*	Controlled PM Emissions (ton/yr)*
BC-1	8.42	10	55.00	90.00%	2.57	0.26

* Uncontrolled PM Emissions (ton/yr) = Density of Solids (lb/gal) * Number of Drums * Drum Capacity / 2000 (lb/ton) / Control Efficiency (%)
Controlled PM Emissions (ton/yr) = Uncontrolled PM Emissions (ton/yr) * (1-Control Efficiency)

Appendix A: Emission Calculations
Emissions from the Manufacturing Lines
Company Name: Mason Corporation
Address City IN Zip: 1049 U.S. Highway 41, Schererville, IN 46375
Permit Number: 089-15312-00094
Plt ID: 089-00094
Reviewer: ERG/KC
Date: 4/11/02

Particulate Emissions from the Manufacturing Lines

Unit	Air Flow Rate (acfm)	Grain Loading (gr/ascf)	Control Efficiency (%)	Uncontrolled PM Emissions (ton/yr)*	Controlled PM Emissions (ton/yr)*
Mfg -1	0.02	17,000	50%	25.53	12.76
Mfg -2	0.02	8,000	50%	12.01	6.01
Mfg -3	0.02	8,000	50%	12.01	6.01

* Uncontrolled PM Emissions (ton/yr) = Air Flow Rate (acfm) * Grain Loading (gr/ascf) / 7000 (gr/lb) * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton) / (1 - Control Efficiency)
** Controlled PM Emissions (ton/yr) = Air Flow Rate (acfm) * Grain Loading (gr/ascf) / 7000 (gr/lb) * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Chlorine Emissions from the Manufacturing Lines

Unit	Air Flow Rate (acfm)	Exhaust Density (lb/dscf)	Concentration (ppm)	Control Efficiency (%)	Uncontrolled Chlorine Emissions (ton/yr)*	Controlled Chlorine Emissions (ton/yr)**
Mfg -1	17,000	0.08	0.2	50.00%	0.14	0.07
Mfg -2	8,000	0.08	0.2	50.00%	0.07	0.03
Mfg -3	8,000	0.08	0.2	50.00%	0.07	0.03

* Uncontrolled Chlorine Emissions (ton/yr) = Air Flow Rate (acfm) * Exhaust Density (lb/ascf) * Concentration (ppm) / 10^6 * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton) / (1 - Control Efficiency)
** Controlled Chlorine Emissions (ton/yr) = Air Flow Rate (acfm) * Exhaust Density (lb/ascf) * Concentration (ppm) / 10^6 * 60 (min/hr) * 8760 (hr/yr) / 2000 (lb/ton)